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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/877,344	06/08/2001	Santhana Krishnamachari	US 010285	1729

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
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BRIARCLIFF MANOR, NY 10510

EXAMINER

SENGI, BEHROOZ M

ART UNIT PAPER NUMBER

2613

DATE MAILED: 09/21/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/877,344

**Applicant(s)**

KRISHNAMACHARI, SANTHANA

**Examiner**

Behrooz Senfi

**Art Unit**

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 – 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagai et al (US 6,414,972) in view of Sun et al (US 5,455,629).

Regarding claim 1, Hagai '972 teaches, "assigning priority to streams of compressed video data" (i.e. fig. 1), and "determining a relative importance ....." reads on (i.e. fig. 1, 106 and 107 for deciding priority of respective frame) and "prioritizing ....." reads on (i.e. fig. 1, 107). Although, Hagai '972 teaches assigning priority to an object in the composite image/frame (i.e. col. 10, lines 50 – 67), which is actually consider as a macro-block with respect to the whole composite image, but fails to explicitly teach prioritizing "macro-blocks" in the video framer. How ever such a features are well known and used in the prior art of the record as evidenced by Sun '629 (i.e. fig. 1, macro-block, col. 1, lines 50 - 52), wherein teaches frame sequence is divided into group of frames and each frame into slice and slice into macro-blocks. Therefore taking the combined teaching of Hagai '972 and Sun '629 as a whole would make the limitation obvious to one skilled in the art at the time of the invention was made.

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Regarding claims 2 – 5, combination of Hagai '972 and Sun '629 teaches “reading a current P frame and examining motion vectors from previous and subsequent B frames, and determining how often each macro-block in the current P frame acts as a reference macro-block .....” reads on (i.e. col. 9, lines 1 – 13, col. 10, lines 8 – 10 of Sun) wherein teaches macro-blocks are occur in a predetermined sequence, and “reading a current I frame and examining motion vectors from previous and subsequent B frames, and determining how often each macro-block in the current I frame act as a reference macro-block in claim 4” (i.e. col. 11, lines 1 – 12 of Sun).

Regarding claim 6, combination of Hagai '972 and Sun '629 teach, “assigning B frame data a lowest relative priority and P frame data a priority relatively higher than B frame and I frame data a priority relatively higher than P frame” (col. 10, lines 37 – 40 of Sun and page 2, of applicant's specification, 10+).

Regarding claims 7 – 9 and 15 - 16, the limitations claimed are substantially similar to claim 1; therefore, the ground for rejecting claim 1 also applies here. As for the additional limitation “overlapping”, see (col. 4, lines 65 – 67 and cols. 10 – 11, lines 49 – 7 of Hagai), and “relative importance of each macro-block is further determined based on values of a plurality of residual DCT coefficients of macro-block in claim 9” (i.e. fig. 2).

Regarding claims 10, 17 and 26, the limitations claimed are substantially similar to claim 1; therefore, the ground for rejecting claim 1 also applies here.

Regarding claims 11 and 27, combination of Hagai '972 and Sun '629 teach, "each set of macro-blocks comprises a complete frame of video data" (i.e. fig. 1, of Sun).

Regarding claims 12 – 13, 18 – 21 and 33, the limitations claimed are substantially similar to claims 2 - 4; therefore, the ground for rejecting claims 2 - 4 also applies here.

Regarding claims 14 and 28, combination of Hagai '972 and Sun '629 teach, "each set of macro-blocks comprises a group of pictures" (i.e. fig. 2, col. 2, lines 55 – 65 of Sun).

Regarding claims 22 - 23, combination of Hagai '972 and Sun '629 teach, "error protection ....." (i.e. col. Abstract, fig. 8, error token 65 of Sun).

Regarding claims 24 – 25 and 29 - 30, the limitations claimed are substantially similar to claims 7 and 9; therefore, the ground for rejecting claims 7 and 9 also applies here.

Regarding claims 31 - 32, combination of Hagai '972 and Sun '629 teach, "decoder system for decoding multi-priority compressed video data" (i.e. fig. 1 of Hagai) and "error protection ....." (i.e. col. Abstract, fig. 8, error token 65 of Sun) and "prioritization" (i.e. fig. 1, priority decision 107 of Hagai, and fig. 4, 26 of Sun) and as for the limitation "program product stored on a recordable media that when executed, prioritizes streams of ..... in claim 32) reads on (i.e. col. 19, lines 40+ of Hagai).

### ***Conclusion***

3. Any inquiry concerning this communication or earlier communications

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from the examiner should be directed to **Behrooz Senfi** whose telephone number is **(703)305-0132**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Chris Kelley** can be reached on **(703)305-4856**.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**Or faxed to:**


**(703) 872-9314**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relative to the status of the application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

B. S. B. S.

9/14/2004

  
CHRIS KELLEY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600